

# MINERAL INDUSTRY SURVEYS

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**Tin, Monthly**

## TIN IN JUNE 1996

Domestic consumption of primary tin in June was estimated by the U.S. Geological Survey (USGS) to be about 3% higher than in May 1996 and about 6% higher than in June 1995.

*The Platt's Metals Week* composite price for tin was \$4.14 per pound; slightly lower than in May and slightly higher than in June 1995.

In Portugal, officials at the Neves Corvo copper/tin mine announced that about 7,800 tons of tin concentrates, grading about 53% tin, equivalent to 4,100 tons of tin metal, will be produced at the mine in 1996. This is about 9% below the 1995 estimate of 4,500 tons of tin metal. The expected fall was attributed to declining ore grades. The Neves Corvo Mine is primarily a copper operation with tin a by-product. The mine sells its tin concentrates to the three major Southeast Asian tin smelters: Malaysia Smelting Corp., Escoy Smelting Corp., and Thaisarco. Somincor owns 51% of the Neves Corvo Mine, with RTZ controlling the remaining 49% (*Tin International*, V. 69, No. 1, 1996).

In Indonesia, P.T. Koba Tin announced that it had completed two of its major capital projects: the Bemban dredge and the Koba tin smelter. Koba is 75% owned by Australia's Renison Goldfields Consolidated and 25% owned by P.T. Tambang Timah. The smelter was completed 4 months ahead of schedule and within the \$4 million budgeted; initial tin ingots have already been poured. The Bemban dredge in the western half of Koba's contract of work area was now operating and had increased production by 33% to an annual rate of over 10,000 tons of tin; the dredge was completed 2 months ahead of schedule and within its \$16 million budget (*Tin International*, V.

69, No. 1, 1996).

In London, England, reports chronicled the marked increase in the fortunes of tinplate in Western Europe during the past year. In competition with aluminum for the beverage can market, Western European tinplate producers increased their share of the market from 20% to over 50%. Many of Western Europe's largest beverage can production lines converted to tinplate, including those of Coca Cola; Pepsi; the British brewery, Scottish and Newcastle; Nanco; Continental Can; and Carnaud/Metalbox. It is estimated that some 21 billion of the 37 billion beverage cans produced in that region in 1996 will be made of tinplate. The Western Europe beverage can market, as a whole, also increased markedly with an 11% growth in the number of metal cans shipped in 1995 vs 1994. The change in tinplate's fortunes was attributed to the rise in aluminum price and its volatility over the past 18 months, advances in technology which have permitted a 20% reduction in the weight of steel cans, and a drive to improve public awareness of the high recovery rate of tinplate from domestic waste (*Metal Bulletin*, June 27, 1996).

In Denmark, the Government will soon present its arguments to the European Union (EU) for the maintenance of Denmark's ban on metal beverage cans, a position which defies the EU's National Packaging and Packaging Waste Directive. If forced to drop the ban, the Government declares it will accept the use of aluminum cans but preserve the ban on steel cans on environmental grounds (*Metal Bulletin*, June 27, 1996).

In Brazil, Arqueana de Minerios e Metais announced it was conducting a feasibility study into the possible

re-opening of its tin/tantalum mine at Arqueana in Minas Gerais state. The firm had suspended production in 1992 (*Tin International*, V. 69, No. 1, 1996).

In Kyrgyzstan, it was announced that the Kara Balta Mining Complex formed a joint venture with the Russian investment group Onyx to expand the Sary Dzhaz tin/tungsten project. Tin output was currently 330 tons yearly and tungsten output 220 tons yearly. Onyx was investing \$8 million in the project. Tin production was expected to rise to 1,100 tons annually and tungsten output to 660 tons annually by mid-1996.

Full capacity at the new mill would be 330,000 tons of ore (*Tin International* V. 69, No. 1, 1996).

In Japan, the Japan Used Can Treatment Association reported that the recycling rate of steel cans in Japan reached 70% in 1994, up from 61% in 1993 (*Tin International*, V. 69, No. 1, 1996).

**Update:**

On August 2, 1996, the *Platt's Metals Week* composite price for tin was \$4.10 per pound.

TABLE 1  
SALIENT TIN STATISTICS 1/

(Metric tons, unless otherwise noted)

	1995 p/	1996		January- June
		May	June	
Production (scrap):				
As tin metal 2/	W	W	W	W
From brass and bronze e/ 3/	10,800	900	900	5,400
Consumption:				
Primary	34,400	3,040 r/	3,120	18,300
Secondary	10,400	854 r/	854	5,200
Imports for consumption, metal	33,200	2,290	NA	NA
Exports , metal	2,790	346	NA	NA
Stocks at end of period	4,580	5,590 r/	5,770	XX
Prices (average cents per pound): 4/				
Metals Week composite	415.61	426.88	413.65	XX
Metals Week New York dealer	294.54	299.94	290.19	XX
London, standard grade, cash	282	290	280	XX
Kuala Lumpur	277.59	288.33	278.01	XX

e/ Estimated. p/ Preliminary. r/ Revised. NA Not available. W Withheld to avoid disclosing company proprietary data. XX Not applicable.

1/ Data are rounded to three significant digits, except prices.

2/ Includes tin metal recovered at detinning and other plants.

3/ Includes tin recovered from copper-, lead-, and tin-base scrap.

4/ Source: Platt's Metals Week.

TABLE 2  
METALS WEEK COMPOSITE PRICE

(Cents per pound)

Period	High	Low	Average
1995 (annual)	473.30	360.15	415.61
1995:			
June	448.99	408.22	436.07
July	453.80	421.42	438.73
August	473.30	431.07	458.66
September	434.50	414.20	424.80
October	427.10	410.54	417.19
November	427.16	419.31	425.35
December	427.10	416.42	419.75
1996:			
January	423.56	415.24	418.59
February	417.70	411.89	415.55
March	427.03	405.03	414.71
April	435.05	422.96	429.61
May	436.25	415.30	426.88
June	418.01	410.83	413.65

Source: Platt's Metals Week.

TABLE 3  
TINPLATE PRODUCTION AND SHIPMENTS IN THE UNITED STATES 1/

(Metric tons, unless otherwise noted)

Period	Tinplate waste (waste, strips, cobble, etc.) (gross weight)	Tinplate (all forms)			Shipments 2/
		Gross weight	Tin content	Tin per metric ton of plate (kilograms)	
1995: p/	205,000	1,660,000	9,600	5.8	2,400,000
1996:					
January	14,200	116,000	729	6.3	179,000
February	16,700	131,000	826	6.3	196,000
March	16,900	144,000	813	5.6	220,000
April	16,100	124,000	790	6.3	202,000
May	16,200	122,000	821	6.7	208,000
June	16,500	137,000	843	6.2	NA

p/ Preliminary. NA Not available.

1/ Data are rounded to three significant digits.

2/ Shipments data from American Iron and Steel Institute monthly publication AIS10.

TABLE 4  
U.S. TIN IMPORTS FOR CONSUMPTION AND EXPORTS 1/

(Metric tons)

Country or product	1996			January- May
	1995	April	May	
Imports:				
Metal (unwrought tin):				
Bolivia	6,630	747	736	3,030
Brazil	8,070	500	642	3,580
China	5,610	88	200	1,660
Indonesia	7,230	1,000	260	2,700
Malaysia	3,810	100	105	365
Russia	149	240	--	352
Other	1,660	135	351	756
Total	33,200	2,810	2,290	12,500
Other, (gross weight):				
Alloys	11,400	1,030	750	4,890
Bars and rods	484	65	72	331
Foil, tubes, and pipes	16	(2/)	--	(2/)
Plates, sheets, and strip	468	3	274	429
Powders and flakes	37	--	--	--
Waste and scrap	15,900	572	503	3,880
Miscellaneous	1,470	75	88	438
Total	29,800	1,750	1,690	9,970
Exports (metal)	2,790	336	346	2,070

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Less than 1/2 unit.

Source: Bureau of the Census.

TABLE 5  
CONSUMPTION OF TIN IN THE UNITED STATES, BY FINISHED PRODUCT 1/

(Metric tons of contained tin)

Product	1996							January- June total
	1995 p/	May			June			
		Primary	Secondary	Total	Primary	Secondary	Total	
Alloys (miscellaneous) 2/	W	W	W	W	W	W	W	W
Babbitt	254	12	W	12	22	W	22	117
Bar tin and anodes	77	9	--	9	9	--	9	44
Bronze and brass	1,940	85	96	181	45	95	140	932
Chemicals	W	W	--	W	W	--	W	W
Collapsible tubes and foil	W	W	W	W	W	--	W	W
Solder	9,470	429	239	668	542	243	785	4,440
Tinning	689	130	--	130	135	--	135	837
Tinplate 3/	9,610	821	W	821	843	W	843	4,820
Tin powder	159	48	--	48	W	--	W	195
White metal 4/	W	W	--	W	W	--	W	8
Other	6,680	607 r/	19	626 r/	624	17	641	3,690
Total reported	28,900	2,140 r/	354 r/	2,500 r/	2,220	355	2,580	15,100
Estimated undistributed consumption 5/	15,900	900	500	1,400	900	500	1,400	8,400
Total	44,800	3,040 r/	854 r/	3,900 r/	3,120	855	3,980	23,500

p/ Preliminary. r/ Revised. W Withheld to avoid disclosing company proprietary data; included with "Other."

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includesterne metal.

3/ Includes secondary pig tin and tin acquired in chemicals.

4/ Includes pewter, britannia metal, and jewelers' metal.

5/ Estimated consumption of plants reporting on an annual basis.

TABLE 6  
DEFENSE LOGISTICS AGENCY  
TIN STOCKPILE DISPOSALS 1/

(Metric tons)

Period	Monthly disposals
1995:	
May	105
June	40
July	40
August	40
September	235
October	110
November	20
December	15
Year total	955
1996:	
January	90
February	450
March	534
April	5
May	10
June	330
Total	1,420

1/ Data are rounded to three significant digits; may not add to totals shown.

Source: Defense Logistics Agency.